Abstract of the Invention

A system for electronically controlling physical operation of dangerous equipment is provided. The system reads data from an electronic key and controls the flow of electricity, air, water and/or hydraulic fluid, for example, to a piece of dangerous equipment. The system includes electronic keys that store electronic key data and an electronic key reader that reads the electronic key data. The electronic key data analyzer analyzes the electronic key data and produces disconnect control data based on the electronic key data and other information like the status of the dangerous equipment. The system further includes a disconnector that can disable the piece of dangerous equipment based on the disconnect control data. The disconnector can also re-enable the piece of dangerous equipment. When operated in a networked environment, the system can perform actions like logging data, scheduling personnel and material, and performing EDI for pieces of dangerous equipment and related equipment.